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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

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Sheet 1 of 1

**Complete if Known**

Application Number	09/683158
Filing Date	11/27/2001
Applicants	Roche, Mgbokwere, Szuba, Samir
Group Art Unit	1762
Examiner Name	Not Yet Known, I. Lin
Attorney Docket Number	201-0454

U.S. PATENT DOCUMENTS

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SEP 1, 2002  
TC 1700

**FOREIGN PATENT DOCUMENTS**

**EXAMINER**

110 ✓

DATE CONSIDERED 12/14/03

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<sup>1</sup>Unique citation designation number    <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached    <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3)    <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the filing date.

serial number of the patent document  Kind of document by the appropriate symbol  
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## OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

EXAMINER INITIAL*	Cite No. S	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	Complete if Known	
			Application Number	Filing Date
		K-H BUSSE; Arc Spraying Of Corded Wires; Thermal Spraying; June 1989; 19-28	11623103	11-12-89
		STEEPER et al.; A Taguchi Experimental Design Study Of Twin-Wire Electric Arc Sprayed Aluminum Coatings; Proceedings of the International Thermal Spray Conference & Exposition; May 28-June 6 1992; 427-432; Orlando, FL.		
		AKIRA OHMORI; Thermal Spraying Current Status And Future Trends; Proceedings of the 14 <sup>th</sup> International Thermal Spray Conference; May 22-26 1985; 1197-1202; Kobe, Japan		
		CRANE et al.; Relationships Between Process Variables, Structure And Mechanical Properties of Arc Sprayed Steel Coatings; Surface Engineering Conference; 1985; 103-118		
		NEWBERY et al.; The Electric Arc Spray Manufacture of Rapid Production Tooling: A Case Study; Proceedings of the 15 <sup>th</sup> International Thermal Spray Conference; May 25-29 1988; 1223-1228; Nice, France		
		ZURECKI et al.; Electric Arc Deposition of Carbon Steel Coatings with Improved Mechanical Properties; Journal of Thermal Spray Technology; December 1997; Volume 6(4); 417-421;		
		HARRIS et al.; Influence of Heat Transfer on the Structure and Properties of Arc Sprayed Low Alloy Steels; Surface Engineering conference; 1985; 78-94		
		FUSSELL et al.; A Sprayed Steel Tool for Permanent Mold Casting of Aluminum; SAE Technical Paper Series; April 22-26 1991; 1-7; Dayton, OH.		
		VOLENIK et al.; Properties of Alloy Steel Coatings Oxidized During Plasma Spraying; Materials Science and Engineering; 1997; A234-236; 493-495		
		WEISS et al.; Arc-Sprayed Steel-Faced Tooling; Journal of Thermal Spray Technology; September 1994; Volume 3(3); 275-281		
		SMITH et al.; An Investigation of the Effects of Droplet Impact Angle in Thermal Spray Deposition; Proceedings of the 7 <sup>th</sup> National Thermal Spray Conference; June 20-24 1994; 603-608; Boston, MA.		
		KOWALSKY et al.; Diagnostic Behavior of the Wire-Arc-Plasma Spray Process; Proceedings of the International Thermal Spray Conference & Exposition; May 28-June 5 1992; 337-342; Orlando, FL.		
		MURAKAMI et al.; Effect of Temperature Rise of Sprayed Deposits of an Fe-2.19wt.%C-0.68wt.%Si Alloy During Thermal Spraying on the Structures and the Mechanical Properties; Materials Science and Engineering; 1994; A174; 85-94		
		PRINZ; Shaping By Deposition; Carnegie Mellon University		
		STEFFENS; Metallurgical Changes In The Arc Spraying Of Steel; British Welding Journal; October 1968; 597-605		
		BREDENDICK-KAMPER et al.; AES Investigation Of Thermally Sprayed Al <sub>2</sub> O <sub>3</sub> Coatings On Steel; Fresenius Journal Anal Chem; 1991; 341; 346-348		

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STATEMENT BY APPLICANT

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Sheet 2 of 2

Application Number	CG1683158
Filing Date	11-25-81
Applicants	
Group Art Unit	
Examiner Name	
Attorney Docket Number	201-1154

✓ JPK	✓ CRANE et al.; Relationships Between Process Variables, Structure and Mechanical Properties Of Arc Sprayed Steel Coatings; First International Conference On Surface Engineering; June 26-28 1985; 103-118; Brighton, UK
✓	✓ KIM et al.; Heat Flow In Multi-Pass Arc Spraying Process; Surface And Coatings Technology; 1989; 398-408;
✓	✓ CRONJAGER et al.; Investigation About The Machinability Of Arc-Sprayed Steel Coatings; Proceedings Of The Eleventh International Thermal Spraying Conference; September 8-12 1986; 863-872; Montreal, Canada
✓	✓ STEFFANS et al.; The Sonarc Process: Combining The Advantages Of Arc And HVOF Spraying; Journal Of Thermal Spray Technology; December 1994; 398-403; Volume 3(4)
✓	✓ WEISS et al.; Rapid Prototyping Of Tools; Carnegie Mellon University; October 1989; 1-23
✓	✓ BHARGAVA et al.; Automated Ejectability Analysis And Parting Surface Generation For Mold Tool Design; Carnegie Mellon University; May 1991; 1-29
✓	✓ FUSSELL et al.; Controlled Microstructure Of Arc Sprayed Metal Shells; Carnegie Mellon University; May 1991; 1-26
✓	✓ CLYENS; Rapid Tooling Manufactured By Spray Tool Steel Directly Onto Stereolithography Models;
✓	✓ HE et al.; Net Shape Simulation And Control; Proceedings Of The 7 <sup>th</sup> National Thermal Spray Conference; June 20-24 1994; 415-419; Boston, MA
✓	✓ GILL et al.; Monitoring Of Residual Stress Generation During Thermal Spraying By Curvature Measurements; Proceedings Of The 7 <sup>th</sup> National Thermal Spray Conference; June 20-24 1994; 581-592; Boston, MA
✓	✓ RASTEGAR et al.; On The Optimal Motion Planning For Solid Freeform Fabrication By Thermal Spraying; Proceedings Of The 7 <sup>th</sup> National Thermal Spray Conference; June 20-24 1994; 463-483; Boston, MA
✓	✓ HARRIS et al.; Influence Of Wire Composition And Other Process Variables On The Internal Stress Of Arc Sprayed Steel Coatings; DVS; 80; 245-249
✓	✓ GREVING et al.; Effect Of Coating Thickness And Residual Stresses On Bond Strength Of C633-79 Thermal Spray Coating Test Specimens; Proceedings of the 7 <sup>th</sup> National Thermal Spray Conference; June 20-24 1994; 639-644; Boston, MA
✓	✓ KNIGHT et al.; Residual Stresses In Thermally Sprayed Coatings; Proceedings of the 1993 National Thermal Spray Conference; June 7-11 1993; 607612; Anaheim, CA
✓	✓ NEISER et al.; Use Of A Computer Model To Assist In VPS Parameter Development; Proceedings of the 1993 National Thermal Spray Conference; June 7-11 1993; 61-66; Anaheim, CA
✓	✓ EINERSON et al.; Intelligent Control Strategies For The Plasma Spray Process; Proceedings of the 1993 National Thermal Spray Conference; June 7-11 1993; 205-211; Anaheim, CA

EXAMINER

JPK

DATE CONSIDERED

11/24/03

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PTO/SB/08A (08-00)

Approved for use through 10/31/2003. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use several sheets if necessary)		<b>Atty. Docket No.</b> 201-0454DP	<b>Serial No.</b> 09 683,158
		<b>First Named Inventor:</b> Allen ROCHE	
<b>Sheet 1 of 2</b>		<b>Filing Date</b> 11/27/2001	<b>Group</b> Unassigned

## U.S. PATENT DOCUMENTS

EXAMINER <i>J. H. John</i>	DATE CONSIDERED <i>10/26/23</i>
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Atty. Docket No. 201-0454-DP	Serial No. 09/683,158
<b>First Named Inventor:</b> Allen ROCHE	
Filing Date 11/27/2001	Group Unassigned

## OTHER PRIOR ART - NON-PATENT LITERATURE DOCUMENTS

Examiner Initial	Cite No.	Include name of the author, title of the article, title of the item, date, page(s), volume-issue number(s), publisher, city and/or country where published
4. JX	C1	Sprayform Tools and Dies Limited (STD). Video Transcript, publication date at least as early as 01 Sept. 2000.
	C2	RADIP TOOLING - Changing the Face of Manufacturing. Compact Disc Digital Data, dated 12 October 2000, trt: 10:50.
	C3	MERLE L. THORPE; and JOSEPH W. MINGE. SPRAY METAL COMPOSITE TOOLING, 26 <sup>th</sup> Annual National SAMPE (Society For The Advancement Of Material And Process Engineering) Symposium And Exhibition, April 28-30, 1981. Pages 374-382, Figures 1-13 and Table I and II.
	C4	Co-pending United States Patent Application No. 09/683,160 entitled "Method And Arrangement For Implementing Heat Treatment During The Execution Of Sprayform <i>Inv: ROCHE</i> , Techniques" and filed 11/27/2001.
	C5	Co-pending United States Patent Application No. 09/683,157 entitled "Method And Arrangement For Implementing Heat Treatment After The Execution Of Sprayform <i>Inv: ALLOR</i> , Techniques" and filed 11/27/2001.

EXAMINER *4. JX*DATE CONSIDERED *11/27/03*

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